Notice of Allowability	Application No.	Applicant(s)
	10/642,874	UPCHURCH, CHARLES J.
	Examiner	Art Unit
	Robert R. Koehler	1775
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this a or other appropriate communication GHTS. This application is subject	pplication. If not included on will be mailed in due course. THIS
1. This communication is responsive to the originally-filed app	olication papers.	
2. The allowed claim(s) is/are <u>1-22</u> .		
3. The drawings filed on are accepted by the Examiner	-	
4. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" on the below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitined including changes required by the Notice of Draftspers 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☒ including changes required by the attached Examiner's Paper No./Mail Date 02202005. Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the paper No./Mail Decomposition of the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attached Examiner's comment regarding REQUIREMENT is also in the deposit attac	been received. been received in Application No. cuments have been received in this of this communication to file a repl ENT of this application. itted. Note the attached EXAMINE as reason(s) why the oath or declar t be submitted. on's Patent Drawing Review (PTC as Amendment / Comment or in the see header according to 37 CFR 1.12.	y complying with the requirements R'S AMENDMENT or NOTICE OF ration is deficient. 0-948) attached Office action of vings in the front (not the back) of 1(d). must be submitted. Note the
 Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 12152003 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	6. ☐ Interview Summar Paper No./Mail D 7. ☑ Examiner's Amend 8. ☑ Examiner's Staten 9. ☑ Other <u>See Continu</u>	ate dment/Comment nent of Reasons for Allowance

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DETAILED ACTION

Drawings

The drawings are objected to because particular features described in the specification are not properly presented in Figure 2, Figure 4, and Figure 6. 1. In Figure 2, "system 26" is missing from the drawing. System 26 includes hooks 28 and struts or arms 30, as described at lines 8 to 18 on page 11 of the specification. Reference number 26 should be indicated in Figure 2 by using a split line which points to reference numbers 28 and 30. See sheet (1) of the "Suggested Drawing Corrections by Examiner" for the placement of reference number 26 and its associated split pointer line. 2. In Figure 4, the piece of solid aluminum has been misnumbered as 100. Lines 19 and 20 on page 19 of the specification identify the solid aluminum in Figure 4 as reference number 104. See sheet (2) of the "Suggested Drawing Corrections by Examiner" for the replacement of reference numeral 100 with reference numeral 104. 3. In Figure 6, the location 132 is missing from the drawing. Location 132 can be found where the passage 128 flares out to a triangular slit or slot 134, as described at line 21 on page 21 to line 4 on page 22 of the specification. Reference number 132 should be indicated in Figure 6 by using a single line which points to the origin of triangular slit or slot 134. See sheet (1) of the "Suggested Drawing Corrections by Examiner" for the placement of reference number 132 and its associated single pointer line. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be

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necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

Claims 1 to 22 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art search has not produced any references which teach, suggest, or disclose applicant's claimed apparatus for applying a thin aluminum layer to an iron article wherein the apparatus includes a system comprising a fluid supply for delivering a fluid under pressure into a container holding liquid aluminum and delivering a high velocity aluminum mist from an outlet nozzle directly to the iron article. The prior art search has not produced any references which teach, suggest, or disclose applicant's claimed method of applying a thin aluminum layer to an iron article including the steps of delivering a fluid into a container holding liquid aluminum, thereby pressurizing the container, producing an aluminum mist by the fluid, and projecting the aluminum mist through an outlet of the container directly to the iron article, thereby producing a thin aluminum layer on the iron article. The prior art search has not produced any references which teach, suggest, or disclose applicant's claimed iron article having a layer of aluminum on an exterior portion wherein the aluminum layer must be absolutely intact and free of cracks in a 180° bend test as claimed by the applicant, or the aluminum layer must be absolutely intact when a bead of welding rod is welded by an electric arc to the iron article.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Robert Koehler whose telephone number is **(571) 272-1536**. The Examiner can normally be reached on Tuesday to Friday from 9:30 AM to 7:00 PM. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on **(571) 272-1535**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ROBERT R. KOEHLER PRIMARY EXAMINER

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